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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,630	05/09/2003	Ben Jones	IO-1009US	7221
24923	7590	12/09/2004	EXAMINER	
PAUL S MADAN MADAN, MOSSMAN & SRIRAM, PC 2603 AUGUSTA, SUITE 700 HOUSTON, TX 77057-1130				FAYYAZ, NASHMIYA SAQIB
		ART UNIT		PAPER NUMBER
		2856		

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/936,630	JONES ET AL.	
	Examiner	Art Unit	
	Nashmiya S. Fayyaz	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 28-48 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) ____ is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) 28-48 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 28,29, 34, 35 drawn to an apparatus with a controller with a loop filter, multiphase clock generator, startup sequencer etc..

Group II, claim(s) 28 and 30, drawn to an apparatus with a controller with a plurality of switches.

Group III, claim(s) 28 and 31, drawn to an apparatus with a controller having a loop filter and one or more integrators,etc..

Group IV, claim(s) 28 ,32, 36 drawn to an apparatus with a multiphase clock generator and data independent clock resynchronization.

Group V, claim(s) 28 and 33, drawn to an apparatus with a sensor simulator.

Group VI, claim(s) 37 and 38, drawn to a method of controlling the operation of a sensor including determining the operating mode of the sensor.

Group VII, claim(s) 37 and 39-42, drawn to a method of controlling wherein the sensor assembly includes a loop filter, one or more integrators,etc.

Group VIII, claim(s)^{37 4nd} 43, drawn to a method of controlling including generating a clock signal. *2y*

Group IX, claim(s) 37,44-45, drawn to a method of controlling including resampling.

Group X, claim(s) 37 and 46, drawn to a method of controlling with an analog circuit.

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Group XI, claim(s) 37 and 47, drawn to a method of controlling including testing the controller.

Group XII, claim(s) 37 and 48, drawn to a method of controlling including offsetting the effects of external acceleration forces.

2. The inventions listed as Groups I-XII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: because .
an apparatus with a controller with a loop filter, multiphase clock generator, startup sequencer etc is not the same as and does not relate to an apparatus with a controller with a plurality of switches which is not the same as and does not relate to an apparatus with a controller having a loop filter and one or more integrators,etc. which is not the same as and does not relate to an apparatus with a multiphase clock generator and data independent clock resynchronization which is not the same as and does not relate to drawn to an apparatus with a sensor simulator which is not the same as and does not relate to a method of controlling the operation of a sensor including determining the operating mode of the sensor which is not the same as and does not relate to a method of controlling wherein the sensor assembly includes a loop filter, one or more integrators,etc which is not the same as and does not relate to a method of controlling including generating a clock signal which is not the same as and does not relate to a method of controlling including resampling which is not the same as and does not relate to a method of controlling with an analog circuit which is not the same as and does not relate to a method of controlling including testing the controller which is not the same as and does not relate to a method of controlling including offsetting the effects of external acceleration forces.

3. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nashmiya S. Fayyaz whose telephone number is 571-272-2192. The examiner can normally be reached on Mondays and Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NF
NFayyaz
Examiner
Art Unit 2856

nf
12/6/04

Hezron E. Williams
HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800